

CLAIMS

What is claimed is:

- 1 1. A method for associating data with product abstractions comprising the steps of:
 - 2 inspecting a first data set that includes data that corresponds to an offer to sell a
 - 3 particular product by a particular party;
 - 4 based on the first data set, associating said particular product with a product category;
 - 5 and
 - 6 matching said first data set with a product abstraction based, at least in part, on the
 - 7 product category to which said particular product corresponds.
- 1 2. The method of Claim 1, wherein said offer to sell a particular product by a particular
- 2 party is a first product offering of a plurality of product offerings; said product abstraction is
- 3 one of a plurality of product abstractions and each product abstraction is associated with one
- 4 or more product categories; and the method further comprises the steps of
 - 5 generating mapping information associating each product offering in said plurality of
 - 6 product offerings with one or more product abstractions in the plurality of
 - 7 product abstractions;
 - 8 receiving a query; and
 - 9 generating a result set for the query based on said mapping information.
- 1 3. The method of Claim 2, further comprising the steps of:
 - 2 charging a party associated with a particular referenced entity in the result set based
 - 3 at least in part on inclusion of said particular referenced entity in said result
 - 4 set; and
 - 5 determining how much to charge the party based, at least in part, on a product
 - 6 category associated with said referenced entity.

- 1 4. The method of Claim 2, wherein the result set is a list of one or more references.
- 1 5. The method of Claim 4, wherein each reference of the list of references corresponds
2 to a referenced entity, and wherein each referenced entity associated with each reference in
3 the list of references is one of a product abstraction, a merchant, a product offering or a
4 product category.
- 1 6. The method of Claim 1, wherein the step of matching said first data set with a product
2 abstraction further comprises the steps of:
 - 3 determining that said first data set does not correspond to any product abstractions in
4 a plurality of existing product abstractions;
 - 5 generating a new product abstraction based on said first data set; and
6 matching said first data set with said new product abstraction.
- 1 7. The method of Claim 1, wherein the step of determining, based on a first data set, a
2 product category to which a particular product corresponds further comprises the steps of:
 - 3 determining that said first data set does not correspond to any product category in a
4 plurality of existing product categories;
 - 5 generating a new product category based on said first data set; and
6 associating said first data set with said new product category.
- 1 8. The method of Claim 2, wherein said result set includes a particular reference to a
2 particular referenced entity, and wherein the method further comprises the steps of
3 providing said one or more result sets to one or more users; and
4 monitoring the number of times that said one or more users select said particular
5 reference associated with said particular referenced entity from said one or
6 more result sets.

1 9. The method of Claim 8, further comprising the step of charging a party associated
2 with said particular referenced entity a fee based on the number of times said one or more
3 users select said particular reference.

4 10. The method of Claim 2, wherein the step of generating a result set further comprises
5 generating a page that contains one or more sponsored references and one or more
6 unsponsored references, wherein a sponsored reference is a first reference associated with a
7 first referenced entity, and for which a first party associated with said first referenced entity
8 is charged for each inclusion of said first reference in said one or more result sets, and
9 wherein an unsponsored reference is second reference for which no party will be charged for
10 each inclusion of said second reference in said one or more result sets.

1 11. The method of Claim 2, wherein the step of generating a result set further comprises
2 generating a page that contains one or more attributes of one or more products in one or more
3 particular product categories.

1 12. The method of Claim 2, wherein the step of generating a result set further comprises
2 generating a page which contains a comparison of one or more attributes of one or more
3 entities that are referenced in the page with one or more attributes of one or more other
4 entities that are referenced in the page.

1 13. The method of Claim 8, further comprising the step of providing, to a party associated
2 with said particular referenced entity, activity reports based on information generated during
3 the step of monitoring the number of times said one or more users selects the reference
4 associated with said particular referenced entity.

1 14. The method of Claim 2, wherein said list of references comprises a plurality of
2 references, and wherein the method further comprises the steps of
3 displaying said plurality of references in a particular order within said result set,
4 determining said particular order based on a set of aspects of each reference in said
5 plurality of references and a set of aspects of each referenced entity to which
6 each reference in said plurality of references refers, wherein the aspects
7 comprise one or more of likelihood that a reference satisfies a query, existence
8 of sponsorship, and cost of sponsorship.

1 15. The method of Claim 2, wherein the step of generating the result set further
2 comprises the steps of:
3 applying a similarity measure between one or more aspects of a particular reference
4 and one or more aspects of a plurality of other references, wherein said
5 aspects include one or more aspects of the reference and one or more aspects
6 of the referenced entity; and
7 selecting which references to include in said result set based on said similarity
8 measure.

1 16. The method of Claim 1, wherein the step of matching said first data set with a product
2 abstraction comprises the step of comparing an identifier corresponding to said product
3 abstraction to an identifier corresponding to said first data set.

1 17. The method of Claim 16, wherein the identifier is chosen from the group consisting
2 of Universal Product Code, International Standard Book Number, manufacturer,
3 manufacturer's part number, and model number.

1 18. The method of Claim 1, wherein the step of determining a product category to which
2 said particular product corresponds comprises the step of comparing an identifier
3 corresponding to said product category to an identifier corresponding to said first data set.

1 19. The method of Claim 18, wherein the identifier is chosen from the group consisting
2 of Universal Product Code, International Standard Book Number, manufacturer,
3 manufacturer's part number, and model number.

1 20. The method of Claim 1, wherein the product category maps to one or more products
2 abstractions, merchants, product offerings, and other product categories.

1 21. The method of Claim 1, further comprising the step of obtaining product information
2 for said first set of data by extracting the product information from an electronic catalog.

1 22. The method of Claim 1, further comprising the step of obtaining product information
2 for said first set of data by crawling web sites over the Internet.

1 23. The method of Claim 1, wherein said offer to sell a particular product by a particular
2 party is a first product offering of a plurality of product offerings; said product abstraction is
3 one of a plurality of product abstractions and each product abstraction is associated with a
4 one or more product categories; and the method further comprises the steps of

5 generating mapping information associating each product offering in said plurality of
6 product offerings with one or more product abstractions in the plurality of
7 product abstractions; and

8 revising said mapping information, wherein the step of revising comprises one or
9 more of the following steps:

10 changing a mapping between a data set and a product abstraction;

11 changing a mapping between a data set and a product offering;
12 changing a mapping between a product abstraction and a product offering;
13 changing a mapping between a product category and a data set;
14 changing a mapping between a first product category and a second product
15 category;
16 changing a mapping between a product category and a product abstraction;
17 changing a mapping between a product category and a product offering;
18 changing a product category;
19 changing a product abstraction;
20 changing a product offering; and
21 changing a data set.

1 24. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 1.

1 25. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 2.

1 26. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 3.

1 27. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 4.

1 28. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 5.

1 29. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 6.

1 30. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 7.

1 31. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 8.

1 32. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 9.

1 33. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 10.

1 34. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 11.

1 35. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 12.

1 36. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 13.

1 37. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 14.

1 38. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 15.

1 39. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 16.

1 40. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 17.

1 41. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 18.

1 42. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 19.

1 43. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 20.

1 44. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 21.

1 45. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 22.

1 46. A machine-readable medium carrying one or more sequences of instructions which,
2 when executed by one or more processors, causes the one or more processors to perform the
3 method recited in Claim 23.